

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/736,892
Source: IFW O
Date Processed by STIC: 3/15/05

ENTERED



IFWO

RAW SEQUENCE LISTING

DATE: 03/15/2005

PATENT APPLICATION: US/10/736,892

TIME: 14:23:18

Input Set : D:\US Utility 50229-424 Sequence Listing.txt

Output Set: N:\CRF4\03152005\J736892.raw

```

3 <110> APPLICANT: University of Kentucky Research Foundation
4     JI, Tai
5     JI, Inhae
7 <120> TITLE OF INVENTION: GENES AND AGENTS TO REGULATE FOLLICULAR DEVELOPMENT,
OVULATION
8     CYCLE AND STERIOGENESIS
10 <130> FILE REFERENCE: 050229-0424
12 <140> CURRENT APPLICATION NUMBER: 10/736,892
13 <141> CURRENT FILING DATE: 2003-12-17
15 <150> PRIOR APPLICATION NUMBER: 60/437,729
16 <151> PRIOR FILING DATE: 2003-01-03
18 <160> NUMBER OF SEQ ID NOS: 13
20 <170> SOFTWARE: PatentIn version 3.3
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 21
24 <212> TYPE: DNA
25 <213> ORGANISM: Artificial Sequence
27 <220> FEATURE:
28 <223> OTHER INFORMATION: Chemically synthesized
30 <400> SEQUENCE: 1
31 ctgactggcg agaactggat g                                21
34 <210> SEQ ID NO: 2
35 <211> LENGTH: 21
36 <212> TYPE: DNA
37 <213> ORGANISM: Artificial Sequence
39 <220> FEATURE:
40 <223> OTHER INFORMATION: Chemically synthesized
42 <400> SEQUENCE: 2
43 acagtatgca ggcttcgctc c                                21
46 <210> SEQ ID NO: 3
47 <211> LENGTH: 21
48 <212> TYPE: DNA
49 <213> ORGANISM: Artificial Sequence
51 <220> FEATURE:
52 <223> OTHER INFORMATION: Chemically synthesized
54 <400> SEQUENCE: 3
55 gctttccctc tggtgaccca c                                21
58 <210> SEQ ID NO: 4
59 <211> LENGTH: 21
60 <212> TYPE: DNA
61 <213> ORGANISM: Artificial Sequence
63 <220> FEATURE:
64 <223> OTHER INFORMATION: Chemically synthesized
66 <400> SEQUENCE: 4

```

RAW SEQUENCE LISTING

DATE: 03/15/2005

PATENT APPLICATION: US/10/736,892

TIME: 14:23:18

Input Set : D:\US Utility 50229-424 Sequence Listing.txt

Output Set: N:\CRF4\03152005\J736892.raw

```

67 agatgttgag ggcagctcga t 21
70 <210> SEQ ID NO: 5
71 <211> LENGTH: 21
72 <212> TYPE: DNA
73 <213> ORGANISM: Artificial Sequence
75 <220> FEATURE:
76 <223> OTHER INFORMATION: Chemically synthesized
78 <400> SEQUENCE: 5
79 ctgaaggtca aagggaaatgt g 21
82 <210> SEQ ID NO: 6
83 <211> LENGTH: 21
84 <212> TYPE: DNA
85 <213> ORGANISM: Artificial Sequence
87 <220> FEATURE:
88 <223> OTHER INFORMATION: Chemically synthesized
90 <400> SEQUENCE: 6
91 ggacagagtc ttgatgatct c 21
94 <210> SEQ ID NO: 7
95 <211> LENGTH: 1099
96 <212> TYPE: DNA
97 <213> ORGANISM: Rattus norvegicus
99 <400> SEQUENCE: 7
100 caggcggcga gatgaggcgg gcgccagcgt ttctgagcgc cgacgagggtg caggaccacc 60
102 tccgcagctc cagcctcctc atcccgcccc tggaggccgc actggccaac ttctccaaag 120
104 gtcccagcgg aggggtcatg caaccggtgc gcaccgtggt gcctgtggcc aagcaccgag 180
106 gcttcttggg agtcatgcca gcctacagtg ccgctgagga tgcaactcacc accaagttag 240
108 tcaccttcta tgagggccac agcaacaatg ctgtcccctc ccaccaggca tcagtgttc 300
110 tctttgatcc cagcaatggt tccctgctgg cggtcatgga tggaaatgtc ataactgcaa 360
112 agaggacagc agccgtctct gccatcgcca ccaagttttt gaagccccca ggcagtgatg 420
114 tgctgtgcat tcttggggct ggggtccagg cgtacagtca ctatgagatc ttcacagaac 480
116 agttctcctt caaggagggtg agaatgtgga accgcaccag ggaaaatgct gagaagtttg 540
118 caagctcagt gcaggagatg gttcgggtct gttcatcagt gcaggaggct gtgacagggtg 600
120 ccgatgtcat catcacagtc accatggcaa cggagcccat tttatttggt gaatgggtga 660
122 agcccggggc tcacatcaat gctgttggag ccagtagacc tgactggcga gaactggatg 720
124 acgagctcat gaagcaagca gtgctgtatg tggactcccg ggaggctgcc ctaaaggagt 780
126 caggagatgt tctgttgtca ggggctgaca tctttgctga gcttggagaa gtggtttcag 840
128 gagcgaagcc tgcatactgt gagaagacca cgggtgttcaa gtctttgggg atggcagtgg 900
130 aggacctggt cgcagccaaa ttagtgtacg attcgtggtc atctggcaag tgagcagaag 960
132 gagctgtgcc tgggctggat ggacgtcacg gctcaaacgc tggctcagtg tctagatcaa 1020
134 aggaggccta gtccccagtg aacgggagtg agagtcactc ataagtattg acatccctat 1080
136 tcatgtttgt ggttggata 1099
139 <210> SEQ ID NO: 8
140 <211> LENGTH: 313
141 <212> TYPE: PRT
142 <213> ORGANISM: Rattus norvegicus
144 <400> SEQUENCE: 8
146 Met Arg Arg Ala Pro Ala Phe Leu Ser Ala Asp Glu Val Gln Asp His
147 1 5 10 15
150 Leu Arg Ser Ser Ser Leu Leu Ile Pro Pro Leu Glu Ala Ala Leu Ala

```

RAW SEQUENCE LISTING

DATE: 03/15/2005

PATENT APPLICATION: US/10/736,892

TIME: 14:23:18

Input Set : D:\US Utility 50229-424 Sequence Listing.txt

Output Set: N:\CRF4\03152005\J736892.raw

```

151.          20          25          30
154 Asn Phe Ser Lys Gly Pro Asp Gly Gly Val Met Gln Pro Val Arg Thr
155          35          40          45
158 Val Val Pro Val Ala Lys His Arg Gly Phe Leu Gly Val Met Pro Ala
159          50          55          60
162 Tyr Ser Ala Ala Glu Asp Ala Leu Thr Thr Lys Leu Val Thr Phe Tyr
163 65          70          75          80
166 Glu Gly His Ser Asn Asn Ala Val Pro Ser His Gln Ala Ser Val Leu
167          85          90          95
170 Leu Phe Asp Pro Ser Asn Gly Ser Leu Leu Ala Val Met Asp Gly Asn
171          100         105         110
174 Val Ile Thr Ala Lys Arg Thr Ala Ala Val Ser Ala Ile Ala Thr Lys
175          115         120         125
178 Phe Leu Lys Pro Pro Gly Ser Asp Val Leu Cys Ile Leu Gly Ala Gly
179          130         135         140
182 Val Gln Ala Tyr Ser His Tyr Glu Ile Phe Thr Glu Gln Phe Ser Phe
183 145          150         155         160
186 Lys Glu Val Arg Met Trp Asn Arg Thr Arg Glu Asn Ala Glu Lys Phe
187          165         170         175
190 Ala Ser Ser Val Gln Gly Asp Val Arg Val Cys Ser Ser Val Gln Glu
191          180         185         190
194 Ala Val Thr Gly Ala Asp Val Ile Ile Thr Val Thr Met Ala Thr Glu
195          195         200         205
198 Pro Ile Leu Phe Gly Glu Trp Val Lys Pro Gly Ala His Ile Asn Ala
199          210         215         220
202 Val Gly Ala Ser Arg Pro Asp Trp Arg Glu Leu Asp Asp Glu Leu Met
203 225          230         235         240
206 Lys Gln Ala Val Leu Tyr Val Asp Ser Arg Glu Ala Ala Leu Lys Glu
207          245         250         255
210 Ser Gly Asp Val Leu Leu Ser Gly Ala Asp Ile Phe Ala Glu Leu Gly
211          260         265         270
214 Glu Val Val Ser Gly Ala Lys Pro Ala Tyr Cys Glu Lys Thr Thr Val
215          275         280         285
218 Phe Lys Ser Leu Gly Met Ala Val Glu Asp Leu Val Ala Ala Lys Leu
219          290         295         300
222 Val Tyr Asp Ser Trp Ser Ser Gly Lys
223 305          310
226 <212> SEQ ID NO: 9
227 <212> LENGTH: 313
228 <212> TYPE: PRT
229 <213> ORGANISM: Mus musculus
231 <400> SEQUENCE: 9
233 Met Lys Arg Ala Pro Ala Phe Leu Ser Ala Glu Glu Val Gln Asp His
234 1          5          10          15
237 Leu Arg Ser Ser Ser Leu Leu Ile Pro Pro Leu Glu Ala Ala Leu Ala
238          20          25          30
241 Asn Phe Ser Lys Gly Pro Asp Gly Gly Val Met Gln Pro Val Arg Thr
242          35          40          45
245 Val Val Pro Val Ala Lys His Arg Gly Phe Leu Gly Val Met Pro Ala

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/736,892

DATE: 03/15/2005

TIME: 14:23:18

Input Set : D:\US Utility 50229-424 Sequence Listing.txt

Output Set: N:\CRF4\03152005\J736892.raw

```

246      50      55      60
249 Tyr Ser Ala Ala Glu Asp Ala Leu Thr Thr Lys Leu Val Thr Phe Tyr
250 65      70      75      80
253 Glu Gly His Ser Asn Thr Ala Val Pro Ser His Gln Ala Ser Val Leu
254      85      90      95
257 Leu Phe Asp Pro Ser Asn Gly Ser Leu Leu Ala Val Met Asp Gly Asn
258      100      105      110
261 Val Ile Thr Ala Lys Arg Thr Ala Ala Val Ser Ala Ile Ala Thr Lys
262      115      120      125
265 Leu Leu Lys Pro Pro Gly Ser Asp Val Leu Cys Ile Leu Gly Ala Gly
266      130      135      140
269 Val Gln Ala Tyr Ser His Tyr Glu Ile Phe Thr Glu Gln Phe Ser Phe
270 145      150      155      160
273 Lys Glu Val Arg Met Trp Asn Arg Thr Arg Glu Asn Ala Glu Lys Phe
274      165      170      175
277 Ala Ser Thr Val Gln Gly Asp Val Arg Val Cys Ser Ser Val Gln Glu
278      180      185      190
281 Ala Val Thr Gly Ala Asp Val Ile Ile Thr Val Thr Met Ala Thr Glu
282      195      200      205
285 Pro Ile Leu Phe Gly Glu Trp Val Lys Pro Gly Ala His Ile Asn Ala
286      210      215      220
289 Val Gly Ala Ser Arg Pro Asp Trp Arg Glu Leu Asp Asp Glu Leu Met
290 225      230      235      240
293 Arg Gln Ala Val Leu Tyr Val Asp Ser Arg Glu Ala Ala Leu Lys Glu
294      245      250      255
297 Ser Gly Asp Val Leu Leu Ser Gly Ala Asp Ile Phe Ala Glu Leu Gly
298      260      265      270
301 Glu Val Ile Ser Gly Ala Lys Pro Ala His Cys Glu Lys Thr Thr Val
302      275      280      285
305 Phe Lys Ser Leu Gly Met Ala Val Glu Asp Leu Val Ala Ala Lys Leu
306      290      295      300
309 Val Tyr Asp Ser Trp Ser Ser Gly Lys
310 305      310
313 <210> SEQ ID NO: 10
314 <211> LENGTH: 314
315 <212> TYPE: PRT
316 <213> ORGANISM: Homo sapiens
318 <400> SEQUENCE: 10
320 Met Ser Arg Val Pro Ala Phe Leu Ser Ala Ala Glu Glu Glu Asp His
321 1      5      10      15
324 Leu Arg Ser Ser Ser Leu Leu Ile Pro Pro Leu Glu Thr Ala Leu Ala
325      20      25      30
328 Asn Phe Ser Ser Gly Glu Asp Gly Gly Val Met Gln Pro Val Arg Thr
329      35      40      45
332 Val Val Pro Val Thr Lys His Arg Gly Tyr Leu Gly Val Met Pro Ala
333      50      55      60
336 Tyr Ser Ala Ala Glu Asp Ala Leu Thr Thr Lys Leu Val Thr Phe Tyr
337 65      70      75      80
340 Glu Asp Arg Gly Ile Thr Ser Val Val Pro Ser His Gln Ala Thr Val

```

RAW SEQUENCE LISTING

DATE: 03/15/2005

PATENT APPLICATION: US/10/736,892

TIME: 14:23:18

Input Set : D:\US Utility 50229-424 Sequence Listing.txt

Output Set: N:\CRF4\03152005\J736892.raw

341		85		90		95	
344	Leu Leu Phe Glu Pro Ser Asn Gly Thr Leu Leu Ala Val Met Asp Gly						
345		100		105		110	
348	Asn Val Ile Thr Ala Lys Arg Thr Ala Ala Val Ser Ala Ile Ala Thr						
349		115		120		125	
352	Lys Phe Leu Lys Pro Pro Ser Ser Glu Val Leu Cys Ile Leu Gly Ala						
353		130		135		140	
356	Gly Val Gln Ala Tyr Ser His Tyr Glu Ile Phe Thr Glu Gln Phe Ser						
357	145		150		155		160
360	Phe Lys Glu Val Arg Ile Trp Asn Arg Thr Lys Glu Asn Ala Glu Lys						
361		165		170		175	
364	Phe Ala Asp Thr Val Gln Gly Glu Val Arg Val Cys Ser Ser Val Gln						
365		180		185		190	
368	Glu Ala Val Ala Gly Ala Asp Val Ile Ile Thr Val Thr Leu Ala Thr						
369		195		200		205	
372	Glu Pro Ile Leu Phe Gly Glu Trp Val Lys Pro Gly Ala His Ile Asn						
373		210		215		220	
376	Ala Val Gly Ala Ser Arg Pro Asp Trp Arg Glu Leu Asp Asp Glu Leu						
377	225		230		235		240
380	Met Glu Gln Ala Val Leu Tyr Val Asp Ser Gln Glu Ala Ala Leu Lys						
381		245		250		255	
384	Glu Ser Gly Asp Val Leu Leu Ser Gly Ala Glu Ile Phe Ala Glu Leu						
385		260		265		270	
388	Gly Glu Val Ile Lys Gly Val Lys Pro Ala His Cys Glu Lys Thr Thr						
389		275		280		285	
392	Val Phe Lys Ser Leu Gly Met Ala Val Glu Asp Thr Val Ala Ala Lys						
393		290		295		300	
396	Leu Ile Tyr Asp Ser Trp Ser Ser Gly Lys						
397	305		310				

400 <210> SEQ ID NO: 11
 401 <211> LENGTH: 1015
 402 <212> TYPE: DNA
 403 <213> ORGANISM: Rattus norvegicus
 405 <400> SEQUENCE: 11

406	gtggcgagca	ggaaaaatgg	cggccggggtt	caaaactgtg	gaaccgctgg	agtattacag	60
408	gagatttctg	aaagaaaact	gccgtccaga	tggaagagaa	cttggtgaat	tcagaaccac	120
410	aactgtcaac	ataggttcga	tcagtacagc	ggatggctct	gctctagtga	agctggggaa	180
412	caccacagtc	atttgtggag	ttaaagcaga	atttgcagca	ccaccagtag	atgcccctga	240
414	tagaggatat	gtcgtcccta	atgtggacct	accaccgctg	tgttcatcga	ggtttcggac	300
416	tggacctcct	ggagaagagg	ctcaagtaac	cagccagttc	attgcagatg	tcattgagaa	360
418	ctcacacata	attaagaaag	aggacttatg	catttctcca	gggaagcttg	cttgggttct	420
420	atactgtgac	cttatttgcc	tagactacga	tgggaaacatt	ttggatgcct	gcacatttgc	480
422	tttgttagca	gctttaaaga	atgtacagtt	gcctgaagtt	actataaatg	aagaaaactgc	540
424	tttagcggaa	gtcaatttaa	agaagaaaag	ttatttgaat	gttagagcaa	accagtttgc	600
426	tacttcattt	gctgtgtttg	atgacacttt	gctgatagtc	gacacctaccg	gggaggaggg	660
428	gcacctgtc	cacaggaacc	ttaaccgtag	taatggacga	ggaaggcaag	ctgtgctgtc	720
430	ttcacaagcc	aggtgggagt	gggctgctgg	agctaaactt	caggactgca	tgagtcgagc	780
432	agtaacgaga	cacaaagaag	tgagcaaaact	actggatgaa	gtaattcaga	gcatgaaaca	840
434	caaatgaaca	gacgccacga	ttgtaaaaca	gctgtaaaaa	ttgtatttgt	tacactgtgc	900

VERIFICATION SUMMARY

DATE: 03/15/2005

PATENT APPLICATION: US/10/736,892

TIME: 14:23:19

Input Set : D:\US Utility 50229-424 Sequence Listing.txt

Output Set: N:\CRF4\03152005\J736892.raw